# Advanced Spaceborne Thermal Emission & Reflection Radiometer



# **ASTER Emergency Backup Plan**

Moshe Pniel Ken Starr

April 3,1997

#### **ASTER Emergency Plan Overview**

- Plan will be jointly executed by JPL ASTER and EDC DAAC
  - The EDC DAAC will;
    - » Ingest Level 1 Tapes from Japan.
    - » Create a Database from Level 1 Metadata to support a rudimentary search and order capability.
    - » Provide ASTER Science Team Capability to select data from ingested Level 1 based on Metadata.
    - » Distribute a small amount of data to ASTER Team Leader SCF and
    - » some ASTER Science Team Members via FTP or Tapes.
  - The JPL ASTER SCF will;
    - » Select a limited set of Level 1 data.
    - » Get appropriate DEM, NCEP or other external data sets needed for Level 2 processing.
    - » Run PGS scripts to produce ASTER Level 2 Data.
    - » Distribute Level 2 scenes to the ASTER Science Team members (primarily for Calibration/Validation efforts.)



# **Data Processing Volumes**

Estimates of L1 Ingest for ESDIS backup Plan

TIME PERIOD (Days)	PERCENT OF MAXIMUM * (% OF SCENES)	SCENES PER DAY	COMMENTS
0 to 40	0	0	No L1 available
40 to 105	0.1 to 10	2 to 150	
105 to 180	100	~800	

<sup>\*</sup> note: The maximum theoretical ASTER scenes produced per day is 777.



## **Data Processing Volumes**

Estimates of L2 Processing for ESDIS backup Plan

TIME PERIOD (Days)	PERCENT OF MAXIMUM (% OF SCENES)	Level 1 SCENES PULLED PER WEEK	Level 2 SCENES GENERATED PER WEEK	COMMENTS
0 to 40	0	0	0	No L1 available
40 to 90	1	5	4	
90 to 105	1 to 2	5	4	
105 to 180	0.1 to 0.2	10	4	



#### **Schedule of Activities**

	Activity	Start	Target Date for Completion
•	Submit Revised Backup Plan to ESIDS	- March 24 1997	April 21 1997
•	Release of Funds to JPL/EDC	-	May 16 1997
•	EDC DAAC Hardware Procurement	-	October 1997
•	JPL SCF Hardware Procurement	- May 19 1997	Sept. 1997
•	Hire additional EDC staff	-	July 1997
•	Design/Build DAAC System	- July 97	Jan. 1998
•	Test DAAC System	- Jan. 1998	June 1998
•	Develop SCF System	- Jan. 1998	May 1998
•	Hire additional JPL SCF Staff	-	March 1998
•	Test SCF System	- May 1998	July 1998
•	ASTER Emergency Plan Operations	- July 1998	December 1998

## **ISSUES**

None at present time.



### **ESDIS - Capability Required at Launch**

- Coordinated Images between the five EOS AM-1 Instruments
  - ASTER will be able to support this if it is known and fits with in the limited capacity of this plan.
- Data for Validation and Calibration of the Science Team.
  - The processing estimates for the Emergency Backup Plan has been designed specifically to support this activity.
- Specific Examples of Level 2 products.
  - ASTER can support this with in the limited capacity of this plan. As long as it does not interfere with Level 2 for Validation and Calibration and does not exceeded limits discussed in this plan.
- Level 3 time dependent data products.
  - Not applicable



